



Massachusetts
Department
of
ENVIRONMENTAL
PROTECTION

f a c t s h e e t

Food Waste Composting

Composting is a process that turns organic material, such as food waste, leaf and yard waste, and waxed cardboard, into products that enrich soil, improve its structure, and increase its moisture and nutrient retention. By diverting these materials from disposal facilities, we reduce our dependence on landfills and incinerators and conserve natural resources.

How much food waste is generated in Massachusetts?

The Department of Environmental Protection (DEP) estimates that food waste accounts for at least 10 percent of all municipal solid waste generated in the state, or nearly 900,000 tons per year. Major sources include:

- Leftover food and soiled paper from homes, restaurants, cafeterias and institutional dining halls.
- Residual materials from food preparation activities at grocery stores; commercial-scale canning, freezing and preserving operations; and food and beverage processing plants.

How much of that food waste is being diverted to composting?

DEP estimates that less than 5 percent of all food waste generated in Massachusetts is currently being diverted to composting operations and backyard compost bins. Some edible food is rescued and sent to food banks, and other food residuals are used as animal feed.

Across the state, there are currently 30 food and organic material composting operations, with a combined permitted capacity to accept nearly 150,000 tons per year. However, many of these facilities are not located near primary food waste sources and some are not being fully utilized.

What is DEP doing to promote food waste composting?

In its *Beyond 2000 Solid Waste Master Plan*, DEP set a goal of reducing municipal solid waste by 70 percent by 2010. Reducing food waste disposal is one of several significant strategies for achieving that goal. A 2002 analysis conducted for DEP by the Tellus Institute indicated that in order to meet the 70 percent target, an additional 300,000 tons of food waste would need to be diverted to composting or reduced at the source. DEP is taking a number of steps toward that objective:

- **Composting Capacity.** DEP provides financial assistance to organics processors through its Recycling Industries Reimbursement Credit (RIRC) grant and Recycling Loan Fund programs. The agency also provides hands-on assistance to processors that are looking to establish and operate composting operations in the state.
- **Collection Route.** DEP works with interested haulers to find efficient means to collect food waste from generators. The agency has developed an organics "density-mapping" database that allows haulers and other interested parties to find food waste generators in specified geographic areas.
- **Source Separation.** DEP supports a number of projects and partnerships designed to help supermarkets, restaurants and other food waste generators develop and implement cost-effective programs to divert food waste from their operations.

- **End Markets.** DEP works with the Massachusetts Highway Department and Operational Services Division (the state procurement office) to create state agency demand for finished compost.
- **Regulations.** DEP regulates compost facilities to ensure that they function in an environmentally sound manner. As the *Master Plan* indicates, DEP will consider revising waste ban regulations (310 CMR 19.017) to add food waste to the list of materials banned from disposal once an adequate food waste diversion infrastructure is in place.

What permits do composting facilities need to operate in Massachusetts?

Regulatory requirements for composting facilities vary depending on facility type. The requirements are established in the DEP Site Assignment Regulations (310 CMR 16.00 and 16.05) and include performance standards for local and state approvals required to build and operate specific types of composting facilities.

- **Conditionally Exempt Operations.** Some facilities, such as leaf and yard waste, agricultural and on-site institutional composting sites, are conditionally exempt from DEP site assignment requirements as long as they meet specific performance standards. These municipal and commercial sites must register with DEP, and agricultural sites must register with the Department of Agricultural Resources. (See 310 CMR 16.05 [4b-d].) Conditionally exempt operations also need to notify local boards of health when they register with either of those state agencies.
- **Determination of Need (DON).** Other facilities, depending on their feedstock and size, may not require site assignment. In a case like this, the facility must submit a DON application to the appropriate DEP regional office and receive DEP approval before construction. (See 310 CMR 16.05 [6].) DEP provides a 21-day period for the local board of health to comment on a draft DON before it becomes final.
- **Site Assignment.** A facility that does not qualify for a Conditional Exemption or a Determination of Need is required to obtain a site assignment from the local board of health. Larger facilities and those that accept mixed solid waste or sludge generally need to go through this process. A site suitability report issued by DEP is required before the board of health makes its decision. After receiving a site assignment, the applicant also needs to apply for and obtain facility permits from DEP. (See 310 CMR 19.000.) A composting facility may also need to obtain approvals from other local agencies before it begins operations (e.g., conservation commission approval is needed if a facility is located near a wetland). Site assignment regulations provide an opportunity for public comment to ensure that communities and neighbors are notified and provided with information about proposed projects. The process also ensures that potential concerns such as odor, noise, and traffic are addressed before a facility is approved.

How can I learn more?

- See *Resources for Food Residuals Generators* and *Resources for Food Residuals Management Professionals* on the DEP composting Web page: <http://www.mass.gov/dep/recycle/compost.htm#food>
- Call Sumner Martinson of DEP at (617) 292-5969 or email him at Sumner.Martinson@state.ma.us
- Visit the organic materials management Web page of the California Integrated Waste Management Board: <http://www.ciwmb.ca.gov/Organics/>

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